



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/666,929	09/18/2003	Victor L. Andelin	P0881D	6471		
23735	7590	08/25/2009	EXAMINER			
DIGIMARC CORPORATION 9405 SW GEMINI DRIVE BEAVERTON, OR 97008				CERVETTI, DAVID GARCIA		
ART UNIT		PAPER NUMBER				
2436						
MAIL DATE		DELIVERY MODE				
08/25/2009		PAPER				

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/666,929	ANDELIN ET AL.	
	Examiner	Art Unit	
	David García Cervetti	2436	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 21 May 2009.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-48 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-48 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 18 September 2003 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date <u>6/18/09</u> .	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

1. Applicant's arguments and amendment filed 5/21/09 have been fully considered.
2. Claims 1-48 are pending and have been examined.

Response to Amendment

3. The requirement for information still stands, Applicant is required to present the requested information. Examiner will determine if the requested information is prior art.
4. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that the applicant, in preparing the responses, fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.
5. The rejection of claim(s) 14-32 under 35 U.S.C. 101 is withdrawn.
6. Regarding claim 35, the arguments are not persuasive. Wu teaches a plurality of watermarks (see abstract) and linking different watermarks amongst each other and to different portions of the document (anticipating "at least a reduced-bit representation of the first payload"). Further, Wu teaches: " In accordance with a first aspect of the invention, a method of embedding linked watermarks in an article requiring protection against forgery is disclosed. The method includes the steps of: extracting information from a first portion of the article; encrypting the extracted information

from the first portion; generating a watermark using the encrypted information; rendering the watermark to a second portion of the article; and repeating the extracting, encrypting, generating and rendering steps with another portion of the article until all relevant information of the article has been processed and a cryptographic link is formed thereby" (col.2, lines 1-15) and "In another embodiment, relevant information in portions of an electronic product are linked to other respective portions of the document in a cryptographic way based on invisible or visible watermarks. That is, information in a first portion of an electronic document, for example, is embedded as an invisible watermark in a second portion of the document. Information in the second portion is embedded as a watermark in a third portion. Likewise, information in the third portion can be embedded as a watermark in the first portion. Numerous other combinations and arrangements are possible." (col.6, lines 35-45). Applicant's arguments are not persuasive. **The claimed subject matter is broader than the prior art, and thus it is anticipated.**

7. Regarding claim 1, Wu is directed to identity documents, as such, a license plate, is an "identity document", thus Wu's teachings apply to protecting document or article (i.e. any identity document or article) against forgery (abstract, col.1-6, col.6, lines 5-16). Also, license plates are not required to be metal (like traditionally understood), i.e. temporary licenses are written on paper and attached to vehicles. Arguments are not persuasive.

8. Regarding claim 4, portions are printed (inherently requiring some kind of layout) on a medium.

9. Regarding claims 6, 12 (a obviousness rejection), Wu teaches information about the passport is printed as a watermark on another portion of the document, i.e. data to uniquely identify the subject of the document is printed as watermark, let it be a VIN, a passport number, etc.
10. Regarding claim 22, same discussion as provided for claim 1 above, applies.
11. Regarding claims 7-8, 20, Wu teaches the reduced bit representation of a value, Bunn teaches the VIN. Wu teaches any permutation of information to create multiple watermarks. What is being watermarked is irrelevant. The fact remains, Wu teaches multiple watermarks on multiple portions of a document, what portions are chosen to be watermarked depend upon the article/document being watermarked. The claimed language is directed to a subset of what Wu's patent already covers, it all depends on what a license plate is.
12. Regarding claim 14, it is clear how the limitations have been mapped. Examiner is at a loss as to what exactly Applicant is arguing. The rejection and the limitations have been mapped to corresponding text on the reference.
13. Regarding claims 16-17, Wu teaches multiple digital signatures and multiple possible combinations of what is watermarked where.
14. Regarding claim 26, Tresser teaches exchanging documents upon digitally signing, the combination with Wu teaches embedding watermarks to provide protection against forgery.
15. *Applicant has not traversed the examiner's use of official notice with regards to the claimed limitations found in claims 1, 2, 22, 31, 32, and 39, these features are taken*

by the examiner to be admitted prior art since the applicant has not adequately challenged the examiner's use of official notice (see MPEP 2144.03(c), 2144.04).

16. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

17. Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

18. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Requirement for Information

19. An issue of public use or on sale activity has been raised in this application. In order for the examiner to properly consider patentability of the claimed invention under 35 U.S.C. 102(b), additional information regarding this issue is required as follows: "Digimarc's Digital Driver's License/ ID card System" and other Digimarc products related to this invention. White paper, user manual, and other relevant documents are respectfully requested.

20. Applicant is reminded that failure to fully reply to this requirement for information will result in a holding of abandonment.

Claim Rejections - 35 USC § 102

21. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

22. Claims 35, 38, and 40-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Wu et al. (US 6,748,533, hereinafter Wu).

Regarding claim 35, Wu teaches a printed document comprising (abstract, passport): a document identifier (fig.1, id portion); a first digital watermark including a first payload, the first payload comprising a representation of the document identifier; a second digital watermark including a second payload, the second payload comprising at least a reduced-bit representation of the first payload (col.6, lines 35-67, information from one part of the document embedded as invisible or visible watermark on a second portion, and this data in a third portion).

Regarding claim 38, Wu teaches wherein the document comprises information printed therein, and wherein said second payload further comprises a representation of at least a portion of the printed information (col.6, lines 35-67).

Regarding claim 40, Wu teaches wherein the reduced-bit representation of the first payload comprises a hash (col.5-6).

Regarding claim 41, Wu teaches wherein the reduced-bit representation of the first payload comprises a cryptographic permutation (col.5-6).

Regarding claim 42, Wu teaches wherein the document comprises variable information printed thereon, and wherein the second digital watermark comprises at least some of the variable information, wherein the variable information varies from document to document (col.5-6).

Claim Rejections - 35 USC § 103

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

24. Claims 1-6, 10-13, 22-25, 39, and 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu.

Regarding claim 1, Wu teaches an identification document comprising auxiliary data steganographically embedded therein (abstract, invisible watermark embedded in seal incorporated to document).

Wu does not expressly disclose a license plate for attachment to a motor vehicle comprising such features, however, these features have been admitted per applicant to have been conventional and well known at the time the invention was made.

Regarding claim 22, Wu teaches a method to authenticate documentation associated with a person, the documentation comprises plural-bit auxiliary data steganographically embedded therein through alterations to graphics, artwork or information carried on the documentation, the auxiliary data comprising at least an identifier (abstract, passport information), said method comprising: receiving optically

captured image data that corresponds to the documentation; utilizing a configured multi-purpose electronic processor analyzing the image data to obtain the identifier, wherein the identifier includes or links to information to uniquely identify the person; and providing a signal in response to the identifier being obtained (abstract, scan watermark to determine authenticity).

Wu does not expressly disclose documentation associated with a motor vehicle comprising such features, however, these features have been admitted per applicant to have been conventional and well known at the time the invention was made.

Regarding claim 2, Wu does not expressly disclose, however, these features have been admitted per applicant to have been conventional and well known at the time the invention was made.

Regarding claim 3, Wu teaches wherein the auxiliary data is steganographically embedded in the license plate in the form of a digital watermark (col.6, lines 35-67).

Regarding claim 4, Wu teaches wherein the digital watermark comprises an orientation component (col.6, lines 35-67).

Regarding claim 5, Wu teaches wherein the auxiliary data comprises two or more payload fields (col.6, lines 35-67).

Regarding claim 6, Wu teaches wherein at least a first of the payload fields includes first plural-bit data to uniquely identify the motor vehicle (col.6, lines 35-67).

Regarding claim 10, Wu teaches wherein at least a second of the payload fields includes second plural-bit data to be used to reference documentation associated with at least one of the motor vehicle or an owner of the vehicle (col.5-6).

Regarding claim 11, Wu teaches wherein the documentation comprises at least one of vehicle registration card, disabled placard, cargo manifest, vehicle insurance document, vehicle title, a driver' s license or a trip permit (col.5-6).

Regarding claim 12, Wu teaches wherein the auxiliary data comprises an identifier to be used to interrogate a data structure, the data structure comprising information associated with the vehicle or with an owner of the vehicle (col.5-6).

Regarding claim 13, Wu teaches wherein the license plate comprises a sticker or tag, and wherein the auxiliary data is steganographically conveyed via the sticker or tag (col.5-6).

Regarding claim 23, Wu teaches wherein the identifier is intertwined with another identifier, the another identifier being steganographically embedded in different documentation, the different documentation also being associated with a motor vehicle (col.5-6).

Regarding claim 24, Wu teaches wherein the documentation comprises at least one of an emissions document or sticker, a license plate, an insurance card, disabled placard, cab or taxi documentation, a trip permit, a cargo manifest, a registration document, an inspection sticker or document, or and a motor vehicle title (col.5-6).

Regarding claim 25, Wu teaches wherein the information further comprises a listing of drivers who are authorized to operate the motor vehicle (col.5-6).

Regarding claim 39, Wu does not expressly disclose, however, these features have been admitted per applicant to have been conventional and well known at the time the invention was made.

Regarding claims 45-46, Wu a programmed computing device storing instructions in memory, said instructions are executable by said programmed computing device to perform the acts of claim 22 / a computer readable media comprising instructions stored thereon to cause a multi-purpose electronic processor to perform the acts of claim 22 (abstract, col.2-3, summary).

25. Claims 7-9 and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu, and further in view of Bunn (US 6,907,528).

Regarding claims 7-9 and 36-37, Wu does not expressly disclose, however Bunn teaches wherein the document is associated with a motor vehicle / wherein the document identifier comprises a vehicle identification number (VIN) (col.3, lines 20-59). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use Wu's teachings on the system of Bunn. One of ordinary skill in the art would have been motivated to perform such a modification to provide multiple watermarks to motor vehicle related documents (Bunn, col.3).

26. Claims 14-21, 26-34, 43-44, and 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tresser et al. (US 2002/0073010, hereinafter Tresser), and further in view of Wu.

Regarding claims 14 and 26, Tresser teaches a method of providing authenticating information for a property title document, said method comprising (abstract):
receiving a first digital signature that is associated with a seller of property (par.16, owner's signature);

receiving a second digital signature that is associated with a buyer of the property (par.16, buyer's signature).

Tresser teaches the owner signing the title to transfer it to someone else (par.16-20) but does not expressly disclose, however, Wu teaches using the first digital signature and the second digital signature to provide a digital watermark payload, the payload comprising authenticating information; and utilizing a configured multi-purpose electronic processor steganographically embedding the digital watermark payload in the property title document (col.5-6).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to embed the owner's signature of the document including the buyer's signature (from Tresser) into the document as a watermark, as taught by Wu. One of ordinary skill in the art would have been motivated to perform such a modification to provide means for verification of the transaction (Wu, col.6, lines 1-35).

Regarding claim 15, the combination of Tresser and Wu teaches wherein the authentication information comprises the first digital signature and the second digital signature (Wu, col.6).

Regarding claim 16, the combination of Tresser and Wu teaches wherein the authentication information comprises a cryptographic permutation of at least one of the first digital signature or the second digital signature (Wu, col.5-6).

Regarding claim 17, the combination of Tresser and Wu teaches wherein the authentication information comprises an output of a function which includes the first digital signature and the second digital signature as inputs (Wu, col.6-7).

Regarding claim 18, the combination of Tresser and Wu teaches wherein at least one of the authentication information, first digital signature and second digital signature comprises a time or date stamp (Wu, col.7-8, Tresser, par.26-28).

Regarding claim 19, the combination of Tresser and Wu teaches wherein the property comprises at least one of a motor vehicle, personal property or real property (Tresser, par.16-20, 33-41, Wu, col.7-8).

Regarding claim 20, the combination of Tresser and Wu teaches wherein the authentication information comprises a reduced-bit representation of at least one of the first digital signature or the second digital signature (Wu, col.7-8).

Regarding claim 21, the combination of Tresser and Wu teaches wherein the property title document comprises at least one of an electronic document or a printed document (Wu, col.7-8).

Regarding claim 27, the combination of Tresser and Wu teaches accessing the first data record (Tresser, par.16-17, Wu, col.7-8).

Regarding claim 28, the combination of Tresser and Wu teaches wherein the first data record and the second data record are associated via the identifier (Tresser, par.16-17, Wu, col.7-8).

Regarding claim 29, the combination of Tresser and Wu teaches presenting at least some of the information that is associated with the motor vehicle or the seller of the motor vehicle to the buyer through a computer interface (Tresser, par.16-17).

Regarding claim 30, the combination of Tresser and Wu teaches prompting the buyer to confirm the transfer through the computer interface (Tresser, par.16-17).

Regarding claims 31-32, the combination of Tresser and Wu does not expressly disclose, however, these features have been admitted per applicant to have been conventional and well known at the time the invention was made.

Regarding claim 33, the combination of Tresser and Wu teaches wherein the information associated with the buyer comprises an account number, said method further comprising automatically debiting the account after the buyer confirms the transfer (Tresser, par.16-17, Wu, col.7-8).

Regarding claim 34, the combination of Tresser and Wu teaches generating a printed title document after the buyer confirms the transfer (Tresser, par.16-17, Wu, col.7-8).

Regarding claims 43-44 and 47-48, the combination of Tresser and Wu teaches a programmed computing device storing instructions in memory, said instructions are executable by said programmed computing device to perform the acts of claim 14, 26 / a programmed computing device storing instructions in memory, said instructions are executable by said programmed computing device to perform the acts of claim 14, 26 (Tresser, abstract, claims 7 and 13, Wu, abstract, col.2-3, summary).

Conclusion

27. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

28. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID CERVETTI whose telephone number is (571)272-5861. The examiner can normally be reached on Monday-Tuesday and Thursday-Friday.

30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami can be reached on (571)272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

31. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David García Cervetti/
Primary Examiner, Art Unit 2436